ART. XIII.—*The Pharmacopœia of the United States of America.* Fourth Decennial Revision. By authority of the National Convention for revising the Pharmacopœia, held at Washington, A. D. 1860. Philadelphia: J. B. Lippincott & Co., 1863.

EACH appearance of the *United States Pharmacopœia* at decennial periods may be said to inaugurate a new epoch in the pharmacy of this country. The work is looked for with interest by the physician and the pharmaceutist as the guide by which he is to be directed in his endeavours to mitigate the evils of disease, and with the expectation that, while retaining all that is good and that has been sanctioned by the experience of the past, it has been rendered additionally worthy of reliance by embodying the contributions made to science in the interim of its previous revision.

The present issue has been more than usually delayed, and it would appear that the anxiety of the public to possess the work has not been diminished by the postponement of its publication. The inquiry for it has been general and emphatic, but perhaps with some want of appreciation of the effort entailed upon the compilers, to whom, as a task of love for science purely, and with the willingness to render their knowledge and skill profitable to their fellow citizens, the enterprise of furnishing up and putting into form the pharmaceutical improvements of a decennial period has been intrusted. The revision and publication of this standard work is no small undertaking, and as stated in the preface, "the Committee of Revision and Publication have realized this fact in the large amount of labour they have encountered in duly examining the mass of materials, manuscript and printed, bearing upon the proper execution of their duties." In extenuation it may be further stated that the revision of the *British Pharmacopœia*, which was commenced some time before that of the United States, has not yetbeen fully completed.

It is our intention in the present notice to enter into an analysis of the modifications and changes which have been introduced into our new National Authority, and to make them as perspicuous to the reader as it is in our power to accomplish. The work is now before the community, and will be judged in accordance with its deserts. Its merits or demerits can only be fully estimated when practical experience has been brought to bear upon the numerous details which are presented, and time will be required for the just appreciation of them. Until this has been done no enlightened criticism can be indulged in.

With the view to facilitate the exposition of the alterations and amendments in the revision before us, it will be expedient to arrange them in their natural order, or in accordance with the purposes and objects designed to be attained in the construction of a Pharmacopœia. By so doing we will be enabled to exhibit methodically, under their appropriate heads, the various items, and to give to them the force which is necessary to their proper comprehension. Upon this plan each alteration or supposed improvement can be satisfactorily exhibited, with the statement of the reasons which have prompted its adoption.

A Pharmacopœia then may be stated to be designed, first, to present a *list* of all the medicines which may be profitably employed in the practice of medicine, including those which have been long used and sanctioned by experience, as well as others which have attained sufficient notoriety to

render them worthy of enumeration. Our own Pharmacopœia has classified medicines so as to pertain to the most important, which is called the *primary list*, or to a subordinate one which is termed the *secondary list*. When an article has remained for a sufficient length of time in the secondary, to test its value and to establish a decided reputation, it may be elevated to the rank of the primary list, or if it has gone into disuse, may be dismissed from either. In this way there is provision against redundancy, and yet safety in securing the use of a reliable article of the materia medica. We are informed that "the list of the Materia Medica has undergone the usual modifications of introductions and dismissions. Fifty-five medicines have been introduced, and twenty-six dismissed, as will appear by consulting the first and second tables appended to the work. Forty-two medicines have been added to the primary, and thirteen to the secondary list. It will be noticed that among the introduced articles a considerable number have not taken the usual course of promotion, but recommended, either by later authority than that of the previous revision, or from long unofficinal employment and the convenience of substitution, have been thought worthy of being made officinal. Chromic acid, cannn, chiretta, yeast, ignatin, leptandra, carbonate of lithia, matico, pumpkin-seed, sulphate of manganese, molasses under the name Syrupus Fusus, whiskey designated as Spiritus Frumenti, and a few others have been introduced, *de novo*, on the ground of strong testimony in their favour as remedial agents, while to others, again, as lactic acid, amylic alcohol, glacial phosphoric acid, stronger alcohol, orange flowers, belladonna root, commercial chloroform, gutta percha, &c., prominence has been given from the part they play in the formation of important preparations. Among the new articles of the secondary list will be found koosso, wahoo, yellow jessamine, cotton root, and kamala.

From the primary list thirteen articles have been dismissed, and a similar number from the secondary. The term Cinchona, as applied in a generic sense, has been discarded; and it will be found that the three varieties of pale, yellow, and red are alone authorized. There is much that can be said for and against this alteration in the mode of designating cinchona bark. So far as certainty can be secured by designating a specific variety of bark, to be used by the apothecary, the present limitation to the three mentioned will be useful; but there are other kinds which are of great importance, which are by this course not recognized as officinal, and which formerly were embraced under a general head as Cinchona. These are employed largely by the manufacturer, and it is not intended to preclude their use in medicine. Very inferior kinds, however, would be interpreted to be included under so general a term, and it is to preclude their substitution for the most valuable kinds that the present step has been taken; perhaps it is the wisest plan in order to obviate imposition. Most of the articles in both the lists which have been dismissed are istoriously of little importance, or have given place to better forms of the same medicines. Lemon has been replaced by lemon-juice, and amber is not used in the shop, as the oil is made by the manufacturer, and has taken its place by the side of other articles.

In this connection it may be proper to state that such medicines, as by the subdivision of labour are now furnished by the manufacturer, are enumerated in the list of them, having been transferred from the preparations. Five articles are thus treated, and as all must admit who are engaged in the dispensation, judiciously.

In connection with an exposition of relishle lists of medicines their nomenclature is an important consideration, and this is based for the most part upon the language of the sciences pertaining to the source from which the articles are respectively derived. It is essential that the nomenclature employed should be brief, clear, and at the same time expressive; and while it is admitted that perfection cannot be attained in this somewhat changing particular, still it may be stated that the authors of the first Pharmacopœia strived diligently to attain this. It would be convenient, in this essential feature, if all analogous works in the English language presented uniformity; but the colleges of the British Empire have never conformed to the same principles with respect to nomenclature, and the authors of our work were therefore forced into the adoption of an independent method, embracing as far as possible the merits of all, with, it must be admitted, their own improvements. Aided by a better understanding of the views of each other, from inter-communication of pharmaceutical knowledge, there is no doubt that when the single British Pharmacopœia makes its appearance, a greater uniformity will be observable between it and our own with respect to nomenclature. The changes which are noticeable in the new revision are either general, involving a principle; or they are particular, pertaining simply to the change of name. The singular number has been adopted in the place of the plural: thus Folium has been substituted for Folia, in association with aconite, belladonna, &c.; and this applies not only to the Latin, but as far as practicable to the English names: thus almond is used for almonds, cabeh for cabehs, fig for figs, nutgall for galls, &c. Where several varieties of an article were formerly placed under a single name, this has been dropped and the special kinds designated: thus Aloe has been dropped and Aloe Barbadensis, Aloe Capensis, Aloe Socotrina, introduced in the place of it. The generic name of the plant has always been assumed for the medicinal where only one species is employed, while if several were used the specific names designated the varieties of the medicine. In reducing the varieties to a single one this rule has been exemplified: thus it has not been deemed essential to designate all the species of Erigeron, and that name has been made to subserve the purpose, so also with Asclepias and Rubus. An exception occurs in the case of Ulmus, which has been altered to Ulmus Fulva. On the contrary, the generic name has been broken up, as it were, into specific names, where these are more definite with reference to the article, as in the case of Sinapis, which has given place to Sinapis Alba and Sinapis Nigra. Where again only one portion of a plant is retained as efficient, the generic name is solely used instead of the portion of it: thus Althæa replaces Althææ Radix; Conium is used for Cunii Folia. Some names have been entirely altered, as, for instance, Calumba is substituted for Colombo, Vinum Xericum for Vinum Album, and Vinum Portense for Vinum Rubrum.

Alteration of nomenclature is not confined to the lists of medicines; it is found in the preparations also. The termination aretum, except in sulphuretum, has been altered to idum, which gives the new titles "cynnidum" and "ferroeynnidum." Antimonii Sulphuretum Præcipitatum has been changed to Antimonium Sulphuratum, in consequence of the want of precision in the ingredients of the compound. Ferrum now comprises all forms of pure iron, and the time-honoured and time-sanctioned Dover's powder has been altered from Pulv. Ipecac. et Opii to Pulvis Ipecacuanhæ Compositus. As the Spiritus Ætheris Nitrici does not contain nitric acid, but the nitrous acid of the new arrangement of the compounds of nitrogen

and oxygen, it is now most satisfactorily denominated Spiritus Ætheris Nitrosi. Another change of name to which allusion ought to be made is of the iodide of mercury to green iodide of mercury. With respect to the names of salines the gender has been changed from masculine to feminine, "as conforming to the best latinity;" and hence, when adjectives are used in connection with them, a corresponding change of the name is exhibited: thus Argenti Nitras Fusus is converted into Argenti Nitras Fusa, &c. This alteration has been long called for by those whose classical nicety was offended in previous editions.

There is another circumstance to be noticed before dismissing this topic of alterations in nomenclature. There existed a series of English names, handed down from time immemorial, derived from vulgar sources, which in reality had no other merit than their habitual employment, and yet without accomplishing any definite purpose, while at the same time many officinal names were made to indicate the same substance as well in English as in Latin. This latter practice has been extended, and it is questionable whether the whole collection of English vulgar names might not have been profitably dispensed with. Augustura and Cascarilla well express the substances to which they are applied; to which have now been added Arnica instead of leopardsbane, Calamus for sweet flag, Digitalis for foxglove, &c. By this method we are freed from the synonomy and homonomy, which have been the bane of nomenclature, and which have led the public to think erroneously that prescriptions should be written in the vernacular, without comprehending that the full adoption of the language of science in the place of the vernacular affords greater safety to the community.

The next object of a pharmacopœia is to present the best forms for the administration of medicines, and in connection with them the most approved formulæ for securing efficiency in the officinal preparations. The alphabetical arrangement has been followed in grouping the preparations, which upon the whole has the advantage of simplicity and convenience, and to some extent admits of scientific order. In every case of a metal or chemical substance, this, however, does not permit all of its preparations being placed under the general head; thus, for instance, the tincture of the chloride of iron, instead of being placed under the head of Ferrum, has necessarily to be separated and placed among the tinctures. A greater observance of the alphabetical arrangement in the classes will indeed be observed in this edition than heretofore: thus the tinctures of iodine may be further cited as being found, not under iodine, but in the class mentioned along with such as are prepared from vegetable substances. A similar transposition will be discovered in Liquors and other classes. Had a more strictly scientific plan been adopted it would have been impossible to avoid all incongruity.

In table third a list is given of the new preparations that have been introduced, which amount to the large number of *one hundred and eleven*. They are to be found throughout the book under their appropriate headings. Many of these medicines have been thought to present better forms for administration than some from the same article of the materia medica long employed, while others again are so clearly improvements as to induce a substitution of them for former preparations. Under the title of Iron will be found chloride, citrate of iron and ammonia, sulphate of iron and ammonia, tartrate of iron and ammonia, citrate of iron and quinia, lactate of iron, pyrophosphate of iron and dried sulphate of iron, while under the head of Liquors will be noticed the solution of the citrate of

iron, solutioa of subsulphate of iroa, and solatioa of tersulphate of iron, all being aovel in this revisioa, and with the old retained prepnratioas of this metal, affording infinite latitade of selectioa. Oae may, in fact, coaclude either that physiciaas have aot lost faith in this article, or that the age of iron has come again. The iodide of iroa has beea dismissed ia consequence of the difficulty of preserving it, aad for the solation of the same the syrup has beea sabstitated, as the chemical character is best retaiaed in this form.

Among the other preparatioas made officinal, may be observed purified oloes, valerianate of ammonia, atropia and its salphate, salphata of cadmiam, sulphate of cinchonia, valeriaaate of qainia, aad valerianate of ziac. Soaic more of the aew preparatioas we shall hove occasion to comment on when giving a carsory view of tha modifications coaaected with tbe classes themselves. The preparations dismissed amoant in all to thirty-sevea; many of them have become obsolete, while others have beea replaced by better. Prepared calamine has been removed ia conseqaence of the aniversally sophisticated aature of the article supplied hy commerce, and the precipitated carboaate of zinc directed ia its place, the Ceratum Calaminæ as o conseqoence has fallea with it. The pulp of parging cassia is aot needed, as the fruit itself is directed ia the coofectioo of seana. Infusion of sarsaparilla is oot reqaired, aad the ahove reasoas may be given with respect to the entire list.

The classes of preparations, it will be perceived, have beea remodelled; this has been called for hy the aamber of the preparations introduced, and thoaght to be expedient ia interpolating them with the old. A necessity for change has also been eatailed in conseqaence of the adoptioa of some aew principles of groaping. As this featare of the work mny give rise to some embarrassment, it will be well to dwell sufficiently upon it. Each class is designated hy the aame of the preparatioa, latinized, in the plural, according to the usual system, or hy the name of the substance coastitoting the preporatioa aad its combiaations, or hy the aame of the substance which is the basis of all the preparations iacladed under it. Hence we have Aceta, Æthera, Aqaæ, Decocta, Emplastræ, Extracta, &c., os classes, hut we hove Aloe, Ammoaia, Atropia, Carbo, Collodiam, Morphia, Qaiaia, Strychaia, &c., also as classes. The remaiader of them are designated hy the aama of the metal to which they heloag, and aader sach designation coma not oaly saliae hodies of the metals proper, hat the alkalies and their combiaatioas; thas aader the class Hydrargyrum will be fonnd tha preparations of mercary, while aader those of Sodium and Potassium will be discovered tha salts of soda aad potassa; snch simplicity of arraagemeat has ooly beeo possible in these latter times, and certainly is remorkable as ao evideace of the advaace aad precisioa of chemical science. Ia the aame of the classes aa alteratioa has beea mnde in a number of iastaaces, thus, Aqaæ Medicatæ is replaced hy Aqaæ, and Viaa Medicata hy Vina, and Carbo Animalis hy Carbo, Collodium has been mada a class, and the class Liquores is peculiar to this revision. Ia the former editions Liqaores or solutioas were placed under the head of each sabstaace which they represeated, hat as they have attaiaed soma aamber, there exista ao reasoa why they should aot be collected aad made to represent a class. This alteration has beea mada apon the principle of preseatiag in the form of aqoeoas solotioa fixed bodies, all of chemical origia, while the class of Aqoæ embraces solatioas of volatile matter. To follow this rule it was aecessary to call Aqaæ Calcis, Liquor

Cnleis, while Liquor Ammoniæ has been again placed under the designation of Aqua, from which, in our opinion, it should never have been taken. One anomnly exists in the class of liquores, which is that of Liquor Guttæ Perchæ, a solution of the substance in chloroform.

Two other classes are new to this revision, viz., Oleo-resinæ and Resinæ. As stated in the prefnce, these "have well defined characters, and their introduction will meet with general approval. The oleo-resins were formerly confounded with the fluid extracts; of the five that are given, those of capsicum, lupulin, and ginger, are newly introduced. "The three resins, those namely of jalap, may-apple, and scammony, appear in the Pharmacopœia for the first time."

A remarkable peculinrity of the work is the great increase of the class of fluid extracts. It would appear as if fashion had exerted its influence in this direction, still there is much that can be said in their favour, the smallness of the dose that can be given, from concentration of the native elements, and their convenience of employment in the place of other preparations, as well as for combination in prescriptions, render their possession highly important. There was nothing more difficult in past times than the administration of cimicifuga; the fluid extract of it now subserves the best purpose. The old fashioned infusion of senna may be dispensed with, and the fluid extract used for all its objects. In the case of ipecacuanha, the fluid extract will be found more effective than any other article. Another article to which we may refer, is the fluid extract of colchicum seed and of the root. Nineteen pages of the book are given to these preparations, on which is recorded the method of forming twenty-five of them. Alcohol, or diluted alcohol, is the menstruum used in all of them, and to a few a small quantity of acetic acid is added. The menstrum used in the oleo-resins is ether, which serves likewise as a mode of distinction between them and the fluid extracts.

In the alterations that have been made, some old and familiar preparations will be discovered under new titles. Thus it may be thought that soap liniment has been forgotten, yet it will be found not as Tinctura Saponis Camphorata, but as Linimentum Saponis, among the liniments; Unguentum Simplex is now Unguentum Adipis, and Ceratum Simplex is Ceratum Adipis. It should be observed that the Liquor Potassæ Citratis has been renamed Mistura Potassæ Citratis, which comports better with the common name neutral mixture. Under the head of spirits and tinctures there have been made several, as we conceive, judicious transpositions. Thus, the awkward designation of Tinctura Olii Menthæ Piperitæ, has been changed to Spiritus Menthæ Piperitæ, and so of Menthæ Viridis. It may be stated here that the elegant Spiritus Ammoniæ Aromaticus has been transferred to the class of Spiritus. Bay rum will also be found as a new preparation in the primary list, under the title of Spiritus Myreiæ, from the name of the myrtle plant from which distilled, the Myrcia Acris. In explanation of some of the alterations in the English names of preparations, it is stated that two plans were originally adopted in designating the cerates, liniments, mixtures, pills, plasters, and ointments:—

"Sometimes the initial word of the officinal title is the name of the chief substance present in the preparation; at other times it is the name of the class to which it belongs. Thus the Pharmacopœia of 1850, has camphor liniment and liniment of turpentine, ammoniac plaster and plaster of ammoniac with mercury, stramonium ointment, and ointment of belladonna, sulphur ointment and ointment of iodine, &c. In cases like these the committee have preferred

the nomenclature which gives precedence to the name of the class to which the preparation belongs, and accordingly they have made forty changes of this kind. The rule, however, was not made absolute, but exceptions were admitted in a few cases in which the present names have been settled by so long usage as to make it inexpedient to change them."

While new classes have been made, containing, perchance, but a single preparation which has given rise to it, others formerly containing but one have been enlarged; thus under the denomination of Bismuthum we find the subcarbonate added to the subnitrate, under Strychnia, the sulphate has been introduced, under Aluminium dried alum and the sulphate of aluminn, while alum itself has been transferred to the primary list as a manufactured commercial article. Collodium having been removed from the ethers, has been made the type of a class containing it and collodion with canthanides.

The alterations made in the formulæ must now occupy a portion of our attention. The Acetum Opii has been slightly altered in composition. According to the old formula, it contained 73$\frac{1}{2}$ grains of opium to the fluidounce; it is now directed to contain 75 grains, which is exactly twice the strength of laudanum. The tinctures of opium in the former revision have been left undisturbed, but a new one has been made official under the name of Tinctura Opii Deodorata. It is to a certain extent a reproduction of the deodorized laudanum. The difference, however, consists in the formation, in the first instance, of an aqueous extract, separating from this the narcotina by means of ether, and then by the addition of the proper amount of water and alcohol producing a diluted tincture. It is intended as a substitute for the nostrums now in the market. It will be observed that diluted hydriodic, diluted nitromuriatic, diluted phosphoric, and sulphurous acids are new preparations, the formulæ for which have been carefully prepared. The object of introducing commercial chloroform into the primary list of the materia medica was to direct attention to the difference between it and the purified article, which alone should be used for medicinal purposes. Under the designation of Chloroformum Purificatum which is the same as Chloroformum of the revision of 1850, a formula is given for the preparation from the common commercial article. This is so important a subject that sufficient stress can hardly be laid upon it. A formula is given for the Extractum Ignatiæ. This preparation has of late years become exceedingly popular with physicians, but made from no definite formula. It is now presented in a reliable form as a substitute for the extract of nux vomica, from which it differs in containing more largely of brucia. It will be noticed that a new process has been adopted for the formation of the subnitrate of bismuth. The carbonate has been introduced, but it is prepared previously to the production of the present preparation, and used in its formation. The object of this process is to avoid the adulteration or presence of arsenic, which has in certain cases complicated the attempt to determine the source of arsenic found in the stomach, a subject some years since brought before the notice of the College of Physicians of Philadelphia, by Prof. R. E. Rogers, and which has attracted attention abroad. In the confection of senna it will be seen that the liquorice root has been discarded, while some little alteration has been admitted with respect to the other ingredients.

The tartrate of antimony and potassa is directed to be prepared by an entirely different process from that formerly used. A pure oxide of antimony is in the first place prepared and substituted for the oxychloride hitherto directed. This has also been introduced as an official preparation. To

prepare the oxide, the precipitate of the oxychloride is formed in the asual way, hnt sahseqaently washed with water of ammonia. The object of this alteration of the process is to give a parer, aad at the same time, as directed hy the Pharmacopœia, a more ecoaomical product. Under the class Mellita is given a formnln for Mel Boracis, which is a convenient preparation; and among the Pills will be foand the formnln for Plammer's pills ander the designation of Pilnlæ Aatimonii Compositæ. With respect to syrups it will be perceived that some useful modifications have beea adopted. The simple syrup formnln has been remodelled aad n slightly weaker preparatioo formed, which renders it, if any chaage is effected, less liable to caady. Distilled water is directed aod the process improved.

A substitatioo has beeo made of the Tiactora Cardamomi Composita for the Tinct. Cinnamomi Composita, which is aa admirahle chnage, the former preparatioa, not heretofore officiaal, being a more elegaat ooe, aad hoth aot being wnnted. Uader the class Ungnenta, oiatment of henzoia has heea adopted. It is simply lard flavonred with the volatile iagredieats of henzoia, and affords nn aromntic basis for compoand ointments extemporaneonsly directed. There has always been complaint with respect to the irritating aatnre of gall ointment, from the difficulty of redacing the nntgall to a snfficiently fine powder; ns n substitnte in case of irritable piles the ointment of taonic acid may be osed, which has additioaally beea made officinal. Tobacco oiatmeat has a better formala thaa in the old revisioo. It is made with a watery extract of the drug. We may in cooeluding our remarks apoa the preparatioas, advert to an error to he fouad in the formula for wine of ergot. Instead of the two troy onnces ia it, foar shoald have been directed: this is an iaadverteace that can be corrected ia the stereotype plntes very readily.

We mnst now pass to the remaining points to complete oar notice; and tho first to which attention may be directed, intimately connected with the formalæ for the preparations, is Weights nad Measures. The qnestioa, which system of weights is most appropriate for a Pharmacopœia, is n *quæstio vexata*. Ia England it appears to have given rise to much perplexity. The Dahlio College has adopted the avoirdupois weight, hat as it is naderstood, this system, after finding favoor with the framers of the *New British Pharmacopœia*, has been discarded in coasequeace of the oatside pressare that has beea hroaght to hear agaiast it. There is ao doaht of the advantage of having hat oae set of weights, hoth for haying aad selling, aad for medicinal preparations. Yet in Eaglnnd aad this coantry castom has so irradically sanctioned two that it is important to dimiaish the evil as far as possible. The maia difficulty is to abolish the avoirdapois from the shop of the apothecary, who has the ndvaatage of the lighter onnce pertaining to it in his sales, whilo iaadverteatly or by design this may be ased ia the preparations. To ohvinte this latter contingency all intermedinte weights between troy grains and troy onnces have been discarded, aod to briag coostaotly before the miad of the apothecary the fact that troy weight is inteoded, the term troy is osed as the prefix to the words oaaces aad graias. There is here oo obscarity, aad the avoirdapois onnce caanot he honestly resorted to. It is siagulnr that fall sets of tho troy weights are rarely kept in the shops, and abeve the drachm, caaaot be foaad. As they can readily be procured ia accordnnce with goverament standards, for this there is ao excase. With respect to this point we are told hy the committee that the snbject was n perplexing oae.

"The final conclusion come to as to weights was to use exclusively in the formulas the grain and the troy ounce, the latter always printed troyounce, as one word. The term *pound* has been disused in them, in order to avoid the liability to mistakes from confounding the troy and avoirdupois pound; and the new word *troyounce* distinctly indicates a weight of four hundred and eighty grains, which cannot be replaced by the avoirdupois ounce through ignorance. Wine measure, as heretofore, is employed in all the formulas; the only change being the disuse of the term gallon, which measure, whenever it occurs in the Pharmacopœia of 1850, is expressed in pints. The adoption of imperial measure would have secured the advantages of uniformity with the liquid measure used throughout the British empire; but so long as the United States continue to legalize the wine measure, it is proper that physicians and apothecaries should conform to it."

Further, under the head of Preliminary Notices some directions are given which should not be overlooked. Thus, by gentle heat is meant any temperature between 90 and 100°; and when the specific gravity is mentioned the temperature assumed is 60°. The exact designation of the term saturation, and the direction for stoppage of bottles should be attended to. The specifications for *percolation* and the *process of displacement* have been rewritten. The difficulties which invest this mode of exhausting substances of their active principles, must be removed by the plain directions which are there given, and as this mode is more universally employed than previously, it must be completely comprehended to render it available. In connection with displacement it is proper to state that when the word "macerate" is employed, it means simply to soak or steep, without any reference to temperature; and when the word "digest" is used, it means in connection with soaking, the maintenance of a temperature from 150 to 200° Fahr.

Precision has also been introduced with respect to the "Fineness of Powders." "For this purpose the terms very fine, fine, moderately fine, moderately coarse, and coarse, are used—the powder passed through a sieve of eighty or more meshes to the linear inch, being designated as—*very fine*, through one of sixty meshes *fine*, through one of fifty meshes *moderately fine*, through one of forty meshes *moderately coarse*, and through one of twenty meshes *coarse*. For the convenience of apothecaries, sieves so constructed and labelled might be introduced, and the above terms thus stamped upon the minds of all manipulators in medicinal articles.

A point ought to be adverted to which has been considered of some importance by pharmaceutists. It is the accentuation of the Latin pharmaceutical names, which will be found in the index.

We here close our somewhat lengthy review of the revision of the United States Pharmacopœia of 1860. First and last, at least five years have been occupied by the various societies who have contributed to it, and by the Committee of Publication. That every pains has been taken to render it worthy of the scientific bodies engaged upon it, and of the nation, there can be no doubt. It has cost much labour, research, and reflection, and in the same spirit with which the work has been executed must it be criticized. The motto which might have been appropriately adopted for the title page, and which would have a prospective significatioo with reference to the next revision, is

"Si quid novisti rectius istis
Candidus imperti; si non his utere mecum."

J. C.